

-20-

5 Claims

1. Absorbent article (10) with a front area (12), a rear area (14), and a central area (16) arranged between the front and rear areas, an upper, liquid-permeable layer (18), which is turned toward the body during use of the absorbent article (10), a lower, liquid-impermeable layer (20), which is turned away from the body during use of the absorbent article (10), a liquid distribution layer (22), which is arranged between the liquid-permeable layer (18) and the liquid-impermeable layer (20), whereby the liquid distribution layer extends from the front area (12) to the rear area (14) of the absorbent article (10), a liquid storage layer (24), which is arranged between the liquid-impermeable layer (20) and the liquid distribution layer (22), whereby the absorbent article (10) has a means for transferring fluid from the liquid distribution layer (22) at least to the part of the liquid storage layer (24) located in the front area (12) and/or the rear area (14) of the absorbent article (10).

2. Absorbent article (10) in accordance with Claim 1, whereby the liquid distribution layer (22) brings about the propagation of the fluid into the front and/or rear area of the absorbent article (10).

3. Absorbent article (10) in accordance with Claim 1 or 2, whereby the liquid distribution layer (22) has undulations that run in the transverse direction of the absorbent article (10) and that are arranged in such a way that they form transport channels in the longitudinal direction.

-21-

4. Absorbent article (10) in accordance with Claim 3, whereby the liquid distribution layer (22) has an undulating strip of material (26) as well as an additional strip of material (28) connected to said undulating strip of material.

5. Absorbent article (10) in accordance with Claim 4, whereby the undulating strip of material (26) is a textile material.

6. Absorbent article (10) in accordance with Claim 4 or 5, whereby the undulating strip of material (26) is highly pigmented.

7. Absorbent article (10) in accordance with one of Claims 4 through 6, whereby the additional strip of material (28) is manufactured from an UCTAD material.

8. Absorbent article (10) in accordance with one of the preceding claims, whereby the liquid storage layer (24) has a higher liquid retention capacity in the front area (12) and/or in the rear area (14) of the absorbent article than in the central part (16).

9. Absorbent article (10) in accordance with one of the preceding claims, whereby the means for transferring the fluid are areas of the liquid distribution layer (22) and of the liquid storage layer (24), which are brought into contact with one another via compression.

10. Absorbent article (10) in accordance with Claim 9, whereby the areas which are brought into contact with one another via compression are arranged in a point-like manner.

11. Absorbent article (10) in accordance with one of the preceding claims, whereby the liquid distribution layer (22) is in contact with the liquid storage layer (24) via an adhesive.

12. Absorbent article (10) in accordance with Claim 11, whereby the adhesive is a hydrophilic glue.

-22-

13. Absorbent article (10) in accordance with Claim 11 or 12, whereby the liquid distribution layer (22) and the liquid storage layer (24) are connected by the adhesive in a point-like manner.

5 14. Absorbent article (10) in accordance with Claim 11 or 12, whereby the liquid distribution layer (22) and the liquid storage layer (24) are connected to one another via a geometrical pattern.

10 15. Absorbent article (10) in accordance with Claim 14, whereby the geometrical pattern is arranged in a diamond-shaped form.

16. Absorbent article (10) in accordance with one of the preceding claims, whereby the liquid distribution layer (22) has areas with funnel-shaped openings (30) as the means for transferring the fluid, whereby these areas are arranged in such a way that the funnel openings taper in the direction of the liquid storage layer (24).

17. Absorbent article (10) in accordance with Claim 16, whereby the funnel-shaped openings (30) are arranged in the additional strip of material (28).

18. Absorbent article (10) in accordance with Claim 17, whereby the funnel-shaped openings (30) are arranged in the edges of the additional strip of material (28), with the edges being folded inward in such a way that they are located underneath the undulating strip of material (26).

25 19. Absorbent article (10) in accordance with Claim 18, whereby the edges, which run in the longitudinal direction, are folded over in such a way that the funnel openings are aligned in a tapering manner in the direction of the liquid storage layer (24).

30 20. Absorbent article (10) in accordance with one of Claims 16 through 19, whereby the funnel-shaped openings (30) have small

0555045 "5455045" 0555045

-23-

absorptive feet (40) at their tapering ends and are in contact with the liquid storage layer (24).

21. Absorbent article (10) in accordance with one of Claims 16 through 20, whereby the funnel-shaped openings (30) of the strip of material (28) are exclusively arranged in the front area (12) and/or in the rear area (14) of the absorbent article (10).

22. Absorbent article (10) in accordance with one of the preceding claims, whereby the liquid storage layer (24) contains a cellulose material.

23. Absorbent article (10) in accordance with one of the preceding claims, whereby the absorbent article contains a liquid-absorbing layer (32) between the liquid-permeable layer (18) and the liquid distribution layer (22).

24. Absorbent article (10) in accordance with Claim 23, whereby the liquid-absorbing layer (32) has an opening (34) that is centrally located and passes right through the layer.

25. Absorbent article (10) in accordance with Claim 23 or 24, whereby the liquid-absorbing layer (32) contains a cellulose material.

26. Absorbent article (10) in accordance with one of the preceding claims, which additionally has a liquid-impermeable barrier layer (38) that extends between the lateral edge (36) of the article (10) and the liquid distribution layer (22).

27. Absorbent article (10) in accordance with one of the preceding claims, whereby the liquid-impermeable layer (20) and/or the liquid-impermeable barrier layer (38) are manufactured from polyethylene, polypropylene, or mixtures thereof.

28. Absorbent article (10) in accordance with one of the preceding claims, whereby an additional strip of material (42) has

-24-

been arranged between the liquid distribution layer (22) and the liquid storage layer (24).

29. Absorbent article (10) in accordance with Claim 28, whereby the additional strip of material (42) has grooves (46) running in the longitudinal direction of the article.

30. Absorbent article (10) in accordance with Claim 28 or 29, whereby the additional strip of material (42) contains funnel-shaped openings (48) and whereby the tapering funnel openings are in contact with the liquid storage layer (24).

31. Absorbent article (10) in accordance with one of Claims 28 through 30, whereby the additional strip of material (42) is manufactured from an UCTAD material.

32. Absorbent article (10) in accordance with one of the preceding claims, whereby an adhesive layer is arranged on the side of the liquid-impermeable layer (20), which is turned away from the body during use of the article, in order to attach the article to an item of clothing.

33. Absorbent article in accordance with one of the preceding claims, whereby the absorbent article is a woman's sanitary pad or a woman's hygiene inlay.

34. Process for the directed drainage of [bodily] liquids released in a localized manner, whereby an absorbent article is in contact with a liquid and the liquid enters the absorbent article through a liquid-permeable covering layer, and with the liquid that has entered being transferred via a liquid distribution layer into areas of the absorbent article in which liquid storage is desired and in which the transfer of liquid from the liquid distribution layer to the liquid storage layer takes place by means that permit the directed transport of the liquid.

-25-

35. Process in accordance with Claim 34, whereby an absorbent article is used in accordance with one of Claims 1 through 33.

5

10

Add  
A8

Add  
C12

09255045 051501

25

30